Amendments to the Claims: This listing of claims will replace all prior versions, and listi ngs, of claims in the application

Listing of Claims:

1. (Currently Amended) A resin optical component made of resin having a high transmittance with respect to light in a required wavelength band, comprising:

resin portions which are discolored by energy in an absorption wavelength band of the resin, wherein

the discolored resin portion constitutes a high light absorptance portion, and

the resin optical component includes a body and at least one lens surface, the resin portions being discolored in the body of the resin optical component without affecting the lens surface.

2. (Original) A resin optical component according to claim 1, wherein

the resin optical component is a resin lens consisting of a spherical or aspherical convex micro lens, and

the high light absorptance portion is formed in the resin outside an area for transmitting the light and constitutes a light-shielding wall for interrupting a stray light.

3. (Original) A resin optical component according to claim 1, wherein

the resin optical component is a resin lens array plate comprising a plurality of spherical or aspherical convex micro lenses which are arrayed at a predetermined pitch, and

the high light absorptance portion is formed in the resin among neighbored convex micro lenses and constitutes a light-shielding wall for interrupting a stray light.

4. (Original) A resin optical component according to claim 1, wherein

the resin optical component is a resin lens array plate comprising a plurality of spherical or aspherical convex micro lenses which are arrayed at a predetermined pitch, and

the high light absorptance portion is formed in the resin among the respective peripheries of neighbored convex micro lenses and constitutes a light-shielding wall for interrupting a stray light.

5. (Original) A resin optical component according to claim 3 or 4, wherein the light-shielding wall is formed one-third or more the thickness of the resin lens array plate in a thickness direction thereof.

6. (Original) A resin optical component according to any one of claims 1-4, wherein the resin is a cycloolefin-based resin, olefin-based resin, or norborunene-based resin.

7. (Original) A method for manufacturing a resin optical component made of resin having a high transmittance with respect to high in a required wavelength band, comprising the steps of:

supplying energy in an absorption wavelength band of the resin to the resin, and

forming a high light absorptance portion by discoloring a portion of the resin by the supplied energy.

8. (Original) A method for manufacturing a resin optical component according to claim 7, wherein the energy is light or radiation.

9. (Original) A method for manufacturing a resin optical component according to claim 8, wherein the energy is a laser beam.

10. (Original) A method for manufacturing a resin optical component according to claim 7, wherein the resin optical component is a resin lens consisting of a spherical or aspherical convex micro lens, and the high light absorptance portion is formed in the resin outside an area for transmitting the light and constitutes a light-shielding wall for interrupting a stray light.

11. (Original) A method for manufacturing a resin optical component according to claim 7, wherein the resin optical component is a resin lens array plate comprising a plurality of spherical or aspherical convex micro lenses which are arrayed at a predetermined pitch, and the high light absorptance portion is formed in the resin among neighbored convex micro lenses and constitutes a light-shielding wall for interrupting a stray light.

12. (Original) A method for manufacturing a resin optical component according to claim 7, wherein the resin optical component is a resin lens array plate comprising a plurality of spherical or aspherical convex micro lenses which are arrayed at a predetermined pitch, and the high light absorptance portion is formed in the resin among the respective peripheries of neighbored convex micro lenses and constitutes a light-shielding wall for interrupting a stray light.

13. (Original) A method for manufacturing a resin optical component according to claim 11 or 12, wherein the light-shielding wall is formed one-third or more the thickness of the resin lens array plate in a thickness direction thereof.

14. (Original) A method for manufacturing a resin optical component according to any one of claims 7-12, wherein the resin is a cycloolefin-based resin, olefin-based resin, or norborunene-based resin.